

Application No.: 10/601,658

Docket No.: 2336-180

## ABSTRACT

~~Disclosed are a FBAR (Film Bulk Acoustic Resonator) device and a method for producing the same. The~~ An FBAR device includes ~~comprises~~ a substrate structure provided with an upper surface, a seed layer formed on the upper surface of the substrate structure and made of one selected from gold (Au) and titanium (Ti), and one or more acoustic resonant portions. Each of the acoustic resonant portions includes a lower electrode film formed on the seed layer and made of molybdenum (Mo), a piezoelectric layer formed on the lower electrode film and made of aluminum nitride (AlN), and an upper electrode film formed on the piezoelectric layer. ~~In the FBAR device, the Mo lower electrode film is formed on the seed layer made of Au or Ti, thus improving the electrode film characteristics (resistivity) and having the smooth surface state and high density structure. Further, the FBAR device of the present invention has an excellent preference for (110) orientation, thus allowing the AlN piezoelectric layer formed on the lower electrode film to have (002) orientation with excellent piezoelectric characteristics. Accordingly, it is possible to improve the resonance characteristics of the FBAR device.~~